

Application Serial No. 10/822,956
Art Unit: 2853

REMARKS

This is a full and timely response to the outstanding nonfinal Office Action mailed April 28, 2006. Through this response, claim 10 has been amended. Reconsideration and allowance of the application and pending claims are respectfully requested.

Amendment of Claim 10

Claim 10 has been amended herein simply for purposes of clarity. Applicant wishes to note that the foregoing amendments are cosmetic in nature and are not made as a condition for obtaining a patent, nor were the amendments necessary in order to obviate the rejection based on cited art. Applicant further submits that these amendments are non-narrowing and, pursuant to *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 122 S. Ct. 1831 (2002), no prosecution history estoppel arises from the amendments. *See also Black & Decker, Inc. v. Hoover Svc. Ctr.*, 886 F.2d 1285, 1294 n. 13 (Fed. Cir. 1989); *Andrew Corp. v. Gabriel Elecs., Inc.*, 847 F.2d 819 (Fed. Cir. 1988); *Hi-Life Prods. Inc. v. Am. Nat'l Water-Mattress Corp.*, 842 F.2d 323, 325 (Fed. Cir. 1988); *Mannesmann Demag Corp. v. Eng'd. Metal Prods. Co., Inc.*, 793 F.2d 1279, 1284-1285 (Fed. Cir. 1986); *Moeller v. Ionetics, Inc.*, 794 F.2d 653 (Fed. Cir. 1986).

Claim Rejections – 35 U.S.C. § 102

Claims 10, 11, and 14-25 stand rejected under 35 U.S.C. §102(b) as allegedly being anticipated by *Lange* (U.S. Patent No. 4,312,009). Applicant respectfully traverses this rejection for at least the reasons set for hereafter.

A proper rejection of a claim under 35 U.S.C. §102 requires that a single prior art reference disclose each element of the claim. *See, e.g., W.L. Gore & Assoc., Inc. v. Garlock, Inc.*,

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721 F.2d 1540, 220 USPQ 303, 313 (Fed. Cir. 1983). There are many elements of each of the independent claims 10, 15, and 19 that are not taught or suggested by *Lange*.

Claim 10 recites "photon absorbing layer is adjacent the fluid chamber and is operative to absorb laser energy emitted from the laser and heat the fluid." Claim 15 recites "means, responsive to optical energy, for heating the fluid in the fluid chamber." Claim 19 recites "plurality photon absorbing layers that generate heat in response to optical energy." *Lange* does not teach or suggest these features. The Office Action relies on the layer 30 of FIG. 11 of *Lange* (described at least at col. 6, lines 15-48) for allegedly anticipating these features of the independent claims. *See Office Action of March 28, 2006* at 3-5. Instead, what *Lange* actually discloses is:

a layer 30 of a photoconductive material whose electrical resistivity is substantially reduced...when illuminated by the electromagnetic radiation to which the assembly is transparent.... The ink contained in chamber 3 is resistive, and plate 1 is electrically conductive or carries an electrically conductive layer on the side facing the chamber 3.... To project a droplet of ink, region 34 of the photoconductive layer 30 facing the selected hole is illuminated through a mask 31 and plate 2 by a narrow beam 33 of the appropriate electromagnetic radiation from a radiation source 51. The resistivity of region 34 therefore decreases sharply, permitting a pulse of electric current to pass through the ink when a voltage is applied between plate 1 and layer 29 from a voltage source 52. An ink droplet is then projected as already described. To this end, the resistivity of the ink must be adjusted as a function of the electrical voltage used.

Lange at col. 6, lines 22-43 (emphasis added). It is clear from the above-cited passage that *Lange* is using electrical current to eject ink droplets, which ink droplets are required to be resistive. This is not suggestive of the elements described above of claims 1, 15, and 19. Thus, for at least this reason, the rejection of claims 10, 15, and 19 should be withdrawn.

In addition, there are other differences in the cited independent claims over *Lange*. For example, claim 10 recites that "photon absorbing layer is adjacent the fluid chamber and is operative to absorb laser energy emitted from the laser." This feature is not taught or suggested

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by *Lange*. The laser of *Lange* is “deflected towards the selected holes by moving mirrors or acoustic/optical or electro-optical methods....” This is not a necessary feature of the printhead of claim 10, as it is for the device of *Lange*. Therefore, for at least this reason also, the rejection of claim 10 should be withdrawn.

Claim 10 also recites “a page-wide array” (emphasis added). This feature is also not taught or suggested by *Lange*. The device of *Lange* is “suited to the printing of small patterns (30 cm², for example)” (col. 8, lines 18-20) (emphasis added), which is used “for printing small patterns onto postal packets, labels, and tickets” (col. 1, lines 1-4). The size of the patterns printed by the device of *Lange* is approximately 4.65 in². Therefore, *Lange* does not teach or suggest the feature of claim 10 recited above and the rejection should be withdrawn for at least this reason also.

Dependent claims 11, 14, 16-18, and 20-25 are believed to be allowable for at least the reason that these claims depend from their respective allowable independent claims 10, 15, and 19. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988). Therefore, Applicant respectfully request that the rejections of these claims be withdrawn as well.

Claim Rejections – 35 U.S.C. § 103

Claims 12 and 13 have been rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over *Lange* in view of *Saito* (U.S. Patent No. 6,068,363). Applicant respectfully traverses this rejection for at least the reasons set forth hereafter.

As noted above, *Lange* fails to teach or suggest the elements of claim 10, from which claims 12 and 13 depend. *Saito* does not cure the deficiencies of *Lange*. Thus, for at least this

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reason alone, claims 12 and 13 are also allowable over the cited art. Applicants respectfully request that the rejections be withdrawn.

Prior Art/Cited References

The prior art made of record has been considered, but is not believed to affect the patentability of the presently pending claims.

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CONCLUSION

In light of the foregoing amendments and for at least the reasons set forth above, Applicant respectfully submits that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the now pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested.

Any other statements in the Office Action that are not explicitly addressed herein are not intended to be admitted. In addition, any and all findings of inherency are traversed as not having been shown to be necessarily present. Further, any and all findings of well-known art and official notice, or statements interpreted similarly, should not be considered well known for at least the specific and particular reason that the Office Action does not include specific factual findings predicated on sound technical and scientific reasoning to support such conclusions.

If, in the opinion of the Examiner, a telephone conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,


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